

AD-A150 290

SOVIET NAVAL MILITARY AND AIR POWER IN THE THIRD WORLD

1/1

(U) KENT STATE UNIV OH LYMAN L LEMNITZER CENTER FOR

NATO STUDIES L J ANDOLINO ET AL. 31 MAR 84

UNCLASSIFIED

N00124-83-RC-02893

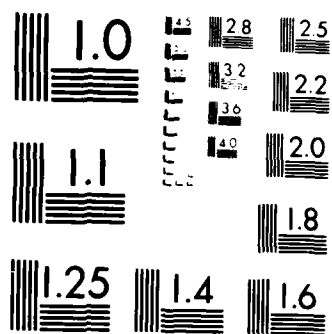
F/G 15/3

NL

END

1-1

1-1



MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS 1963-A

AD-A150 290

SOVIET NAVAL MILITARY AND AIR  
POWER IN THE THIRD WORLD

by

LOUIS J. ANDOLINO

LOUIS R. ELTSCHER

Contract No. N00124-83RC-02893

Prepared for  
CENTER FOR NAVAL WARFARE STUDIES  
NAVAL WAR COLLEGE  
NEWPORT, RI 02841

Prepared by  
THE LYMAN L. LEMNITZER CENTER  
FOR NATO STUDIES  
KENT STATE UNIVERSITY  
KENT, OHIO 44242

DTIC FILE COPY

This document has been approved  
for public release and sale; its  
distribution is unlimited.

DTIC  
ELECTE  
FEB 11 1985

A

85 01 24 120

"SOVIET NAVAL MILITARY AND AIR POWER IN THE THIRD WORLD"

Louis J. Andolino and Louis R. Eltscher

Approved For  
 Release  
 Date  
 11/11/2013  
 Distribution/  
 Available to  
 Available to  
 23

181.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER N00124-83RC-02893	2. GOVT ACCESSION NO. <b>H150290</b>	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) SOVIET NAVAL MILITARY AND AIR POWER IN THE THIRD WORLD		5. TYPE OF REPORT & PERIOD COVERED NATO 31MAR84
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) LOUIS J. ANDOLINO LOUIS R. ELTSCHER		8. CONTRACT OR GRANT NUMBER(s) N00124-83RC-02893
9. PERFORMING ORGANIZATION NAME AND ADDRESS The Lyman L. Lemnitzer Ctr. for NATO Studies Kent State University Kent, Ohio 44242		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS Center for Naval Warfare Studies Naval War College Newport, RI 02841-5010		12. REPORT DATE 31MAR83
		13. NUMBER OF PAGES 39
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) Director Center for Naval Warfare Studies Naval War College, Newport, RI 02841		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)  A: Approved for public release; distribution is unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) NATO SOVIET UNION WARSAW PACT THIRD WORLD		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This paper specifically includes an overview of Soviet military posture beyond the borders of the USSR; evaluation of the political and crisis significance and utility of Soviet military deployments beyond the borders of the USSR; NATO nations comparative assessment of military threat to NATO interests embodied in that Soviet military posture; and policy recommendations.		

DD FORM 1473 EDITION OF NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

The inevitable changes affecting the developing regions of the world in recent years have presented the Soviet Union with opportunities for projecting power and influence well beyond its own borders. Indeed, it would seem axiomatic that as Third World countries have established independence and pursued policies at odds with the major Western powers, the Soviet global position has improved significantly. The growth of Soviet power, coupled with a declining western influence in the Third World, has provided the USSR with an opportunity to extend its long-standing interest in gaining access and exerting influence in these strategically important countries. Thus, as a result of dramatic changes in the international system in recent decades, the Soviet Union has moved well beyond the status of a regional state to that of a major world power with global aspirations and presence.<sup>1</sup>

Doubtless, the *raison d'etre* of Soviet foreign policy will continue to be the safeguarding of Soviet territorial borders, plus maintaining the security of the Eastern Bloc. In this respect, Soviet foreign policy is primarily related to regional imperatives and will continue to be so in the foreseeable future. Nevertheless, the Soviet Union has formulated and pursued global objectives with specific interest placed on the developing nations of the Third World where opportunities for access and influence are most apparent and where the rewards are high, and the risks are minimal. Soviet objectives seem clear when one considers the interrelated advantages that accrue to the USSR from a significant presence in various regions of Africa, Asia, and Latin America. Soviet access and influence in the Third World gives the USSR economic, military, and political leverage, and at the same time, denies these advantages to others,

such as the United States and The People's Republic of China.<sup>2</sup> Though the USSR has long sought to project its influence into Third World areas, the means for such projection were severely lacking in the past. Moreover, whenever the Soviet Union has attempted to use economic, cultural, and ideological instruments to influence Third World states, results were meager and were a source of frustration to Kremlin leaders. What is clear is that the Soviet Union has a limited capacity to compete with the West for predominant influence in the developing countries. This is attested to by an impressive number of policy failures, notably Ghana, Guinea, Nigeria, Egypt, Somalia, and Sudan.

The extent to which the USSR has developed a global reach and linkages with several Third World states is due mainly to the dramatic growth in the Soviet military capability. As a result of Moscow's limited capacity to achieve and sustain enduring ties with these states through the use of non-military instruments, the Soviet Union has come to rely on various foreign policy instruments related to its military might.<sup>3</sup> Therefore, Soviet Third World activities in recent years have been characterized by increased arms transfers and sales most often followed by significant numbers of military advisors and technicians, as well as large numbers of proxy troops. Moreover, in order for the USSR to expand its global role, especially in the Third World, it has been necessary for the Kremlin to focus on the development of the appropriate instruments of power projection. Thus, considerable attention has been paid to the creation of weapons systems that not only enhance the defense of the Motherland but give additional capacity to project power well beyond its borders.

## INSTRUMENTS OF POWER PROJECTION

At the very core of the Soviet diplomatic foray into the far reaches of the developing regions of Africa, Asia, and Latin America, is the growing capability of the Soviet Navy. As a classic instrument of diplomacy, sea power remains the most viable method for a nation to assert itself on a global scale. Certain advantages can accrue to a nation using sea power rather than conventional land forces in the pursuit of diplomatic objectives. These include a greater flexibility, in which a higher degree of control can be exercised over the commitment and withdrawal of forces, a higher degree of visibility, thereby enhancing certain psychological factors such as prestige, coercion and reassurance, and what has been described as "universality or pervasiveness."<sup>4</sup> This last element conveys the notion that the oceans are indeed an international highway for the nations of the world, and this, "...makes a state possessed of sea power the neighbour of every other country that is accessible by sea."<sup>5</sup> This lesson of history has not been lost on Admiral of the Fleet of the Soviet Union, S. G. Gorshkov, who has argued convincingly that the Soviet Union, as a global power, requires a modern navy, not only for purely military purposes, but as an essential instrument of diplomacy, particularly in the Third World. On this point he has written of:

...the specific features of the navy as a military factor which has been used in peacetime for demonstrating the economic and military power of the state beyond its confines, and the fact that, of all the branches of the armed forces, the navy is best capable of operationally ensuring the state interests of the country beyond its borders.<sup>6</sup>



Indeed, in recent years the Soviet Union has made enormous strides in naval construction and deployment, giving it a "blue water" capability. Steady improvements in the surface naval fleet, amphibious forces and the merchant fleet have certainly taken place. Moreover, considerable advances in naval air power and airlift capability are evident as well. Of course, as with any great power, the "core" of global projection rests with the development of a major naval force capable of projecting "presence" in remote, but strategically important regions of the world.

The most significant, and perhaps the most interesting development in the Soviet navy in recent years, is the construction of its first true aircraft carrier. With a conventional large deck, it is estimated that this nuclear-powered carrier will have a 60,000 to 70,000 ton displacement and is expected to have catapults and arresting gear for the operation of sixty to seventy fixed-wing aircraft.<sup>7</sup> Currently being built at the Black Sea Shipyard at Nikolayev, it can be ready for operational service by the end of this decade. The new carrier will be the largest ship by far in the existing Soviet naval inventory.<sup>8</sup>

Speculation centers around what aircraft will be deployed on this carrier. The question is, will the Soviet aviation industry develop an entirely new aircraft for this shipboard role, or will it modify an existing design for the new mission? If the past is any indication, the latter possibility seems more likely for the immediate future since Soviet engineers traditionally have tended to follow a conservative design philosophy. The most likely candidate for a shipboard role appears to be the MiG-23/27 Flogger, although the Su-24 Fencer has also been mentioned as a possibility.<sup>9</sup>

The decision by the Kremlin to build a conventional aircraft carrier, though a daring and bold move to enhance both its naval strike capability and military diplomacy, is fraught with problems. For example, carrier operations require aircraft designed to entirely different design parameters from those of land-based aircraft. Normally, G-loads are much higher in deck landings and thus demand a higher degree of structural integrity. Moreover, carrier landings require greater cockpit visibility plus good low speed performance, often at high angles of attack, characteristics which are not always found in land-based planes. Hence, the retrofitting of existing designs such as the MiG-23/27 could conceivably create some unforeseen difficulties for Soviet naval air forces. However, the performance envelope of the MiG-23/27 without retrofitting appears to be suitable for carrier operations, and the variable geometry wing certainly is an aid in low speed flight. Nonetheless, any "beefing up" of the airframe to meet carrier requirements could raise the wing loading to an unacceptably high level.

Hence, despite the Soviet penchant for upgrading proven designs, there is a good possibility that a new aircraft will be designed specifically for carrier operations. Three new designs are just now reaching operational status which conceivably might have seaborne capability. These are the MiG-29 Fulcrum, MiG-31 Foxhound and Su-27 Flanker. Although there is no evidence to support the assertion, it seems reasonable to assume that at least one of these fighters is being developed for carrier operations. It is difficult to believe that the Soviet Union would spend time and money to develop a conventional aircraft carrier and fail to

produce a new generation of aircraft to operate from it. Of the aforementioned three, the two most likely candidates appear to be the MiG-27 and Su-27, since their design characteristics and performance envelope seem to be more suitable than the MiG-31. The MiG-31 is primarily an updated version of the MiG-25, whereas the other two are new designs.<sup>10</sup>

The introduction of a more conventionally designed Soviet aircraft carrier has revolutionary implications. For one thing, it provides the USSR with an alternative base of naval and air strike capability, far different from operations out of home and "friendly" foreign bases, that has been the mode of operation until the present. Additionally, there is the profound impact that the deployment of such a carrier will have on Soviet Third World diplomacy. There is probably a no more impressive sight than a fully-equipped carrier entering another country's harbor, whether for "courtesy calls," "showing the flag," other diplomatic missions, or for military purposes. Such an instrument has high visibility, and thus psychological impact. Jan Breemer has noted the important role of such an aircraft carrier in influencing the perceptions and behavior of foreign governments through the nonviolent demonstration of naval strength when he writes:

The very novelty of the Soviet Navy's first large-deck carrier alone is likely to change Western as well as Third World calculations of Soviet intentions in times of crisis. The presence of a carrier task force sends a different set of signals than does that of a grouping without an air capability. The deployment of sea-based strike aviation carries with it the immediate threat of power projection that Soviet naval presence forces have hitherto lacked.<sup>11</sup>

In many respects, the construction of the new carrier is a logical continuation of the two Novaya class helicopter carriers completed in the late 1960's. This earlier design was the Soviet's first attempt at sea-based air power projection with its ability to carry fourteen W-25 Hornet helicopters. Though primarily an ASW instrument, it did give the Soviet navy a limited power projection capability previously lacking. The next step in this development was the construction of the Kiev class VTOL carrier.<sup>12</sup> The angle-decked Kiev is capable of deploying a mix of approximately thirty-six rotary and fixed-wing aircraft which include up to twenty-four Hornet helicopters and twelve Yak-36 Forgers. Currently, the Yak-36 is the only carrier-based fixed wing strike aircraft deployed by Soviet naval forces. The Yak-36 performance capabilities are subject to limitations, however. For example, it does not have short take-off capability, and consequently is limited in its payload. Furthermore, engine reliability is a potential problem, creating further risks since the Yak-36 cannot land with one engine out. In addition, vectored thrust is not possible in air combat. Moreover, the power projection role of the Yak-36 is also limited by a combat radius of only 150 miles.<sup>13</sup> However, despite their limitations, the Kiev class carriers still provide the Soviet Union with an effective instrument of power projection.

The aircraft carriers currently deployed by the Soviet Navy are enhanced by the impressive Kirov class nuclear-powered, guided missile cruiser. This ship is the largest naval vessel built by any nation since World War II, except for aircraft carriers, and has a formidable array of advanced weaponry and sophisticated sensors. As the first Soviet warship equipped with nuclear propulsion, the Kirov has an extraordinary

range and the capacity to move rapidly to remote areas while also possessing long-term staying power on station. John Houser has cited the Kiriz as an invaluable asset to Soviet military diplomacy: "An ideal flagship for any Soviet task force, the Kiriz cruiser is the type of ship the USSR would like to display in Third World ports in peacetime...."<sup>14</sup>

The Soviet Navy now possesses a wide array of ocean-going cruisers, destroyers, and other vessels that enhance its global presence. Of particular significance are some of the recent additions to the Soviet surface fleet. For example, with the construction of the Krasina class (ex-Black Com 1), the Soviet Navy has introduced a new class of guided missile cruiser. One of these ships is now operational with two more in production.<sup>15</sup> Moreover, additional units of two classes of guided missile destroyers, the Udaloy and The Sovremennyy, continue in production.<sup>16</sup> What characterizes these newest units in the Soviet naval inventory is that they tend to be faster, are larger than previous designs, and certainly are geared to "blue water" operations.

Yet, as the Soviet Navy has developed an open-ocean capability, its naval strategists have increasingly had to confront the problems inherent with such a capability. Until relatively recently the Soviet Navy had to rely in large measure on its sizable merchant marine fleet to supply, replenish, and provide military sea-lift. Indeed, it wasn't until the late 1960's and early 1970's that the Soviet Navy developed specific ship types capable of sustaining naval operations in distant areas, with the introduction of such ships as the Dubna and Boris Chilikin classes of replenishment oilers. However, the most significant development

In reinforcement capabilities was the commissioning of the 40,000 ton Berezina class in 1977. In addition to its large size, the Berezina carries surface to air missiles for self defense as well as ASW weaponry and two Harrier C helicopters. Most important is the ability of this ship to support Soviet naval operations any place in the world and add significantly to Soviet power projection. Despite the considerable addition to the Soviet support fleet, the Berezina remains only one of a kind with no others under construction. For whatever reason this is the case, the Soviet Navy will remain deficient in this area for some time to come.<sup>17</sup>

The amphibious landing capacity of the Soviet Union remains a modest aspect of its power projection in the Third World. While in recent years the Soviet Navy has had amphibious ships such as the Polish built Polnochny and Ropucha classes and the Alligator class in service, along with a complement of an estimated force of 12,000 in the naval infantry, these ships and personnel to a large extent have not been sufficiently adequate for deployment beyond the Eurasian theater. This limitation has been rectified with the commissioning of two Ivan Rogov class transport docks which have the capacity to carry 550 troops--many more could be carried in short transit--with all of their equipment and vehicles, hovercraft, and up to four Harrier C helicopters. The impressive sea lift capacity, due to its size and versatility, has obviously enhanced Soviet military presence and capability in Third World regions. However, since there is no evidence of further construction of the Ivan Rogov class, the assumption is that the Soviet Navy will continue to place considerable reliance on the merchant fleet as troop and equipment transports.

In addition to its logistical role in support of open-ocean naval operations, the Soviet merchant fleet, consisting of approximately 1,700 ships, serves a number of other functions that enhance Soviet power projection throughout the world. For example, the merchant fleet is used extensively to supply strategic military bases both at home and in foreign ports such as Cuba. Moreover, the very pervasiveness of the fleet gives the Soviet Union "presence" in all major world ports from "showing the flag" of modern merchant ships to on-shore activities of Soviet personnel. Beginning in 1973, a new class of cargo ship--roll-on, roll-off (RO/RO)--entered the merchant fleet which has particular relevance for Third World deployment. These ships can load and unload cargo without the use of sophisticated docking facilities, and thus are adaptable to the rudimentary conditions often found in the ports of less developed countries. With its present complement of forty-five in service, the RO/RO ships are ideal for both commercial and military transport. Therefore, the merchant fleet can be considered in many ways more of a naval auxiliary than a commercial fleet.<sup>18</sup>

In relating this fleet to activities in Third World areas, it is also important to note that in a comparative sense Soviet merchant ships tend to be smaller than those of other major merchant lines. Doubtless, this is so to accommodate the smaller ports in the USSR, but also offers the advantage of being "...more suitable for serving Third World nations, which have few if any ports that can accommodate some of the large Western merchant ships...."<sup>19</sup> In terms of future projection the "young" age of this fleet is also significant--approximately 90% of these ships have less than twenty years of service and have an average age of twelve

years.<sup>20</sup> If current trends continue, it is estimated that by 1990 there will be approximately 2,000 dry cargo ships with 400 tankers capable of open-ocean operations.<sup>21</sup> In citing the U.S. Navy's view on this subject, James Hansen has noted that:

...the Soviet Union is expected to continue to develop a multi-mission merchant marine which can compete economically in international markets and provide many other services in support of state policy, while maintaining the ability to respond rapidly to provide extensive military support.<sup>22</sup>

Overall, the Soviet Union is producing what Admiral Gorshkov referred to as a "balanced fleet" with the dual purpose of national defense and power projection.<sup>23</sup> This, of course, includes continued Soviet emphasis on the development and deployment of what is the world's largest submarine force. With an estimated active fleet of some 367 submarines, the Soviet Navy will continue to be primarily a submarine navy.<sup>24</sup> Despite emphasis placed on surface ships in naval diplomacy, the submarine force plays a significant role in this important aspect of force projection. First, the strategic strike capability of Soviet submarines helps to neutralize U.S. power, thereby complementing the USSR's use of its surface fleet in the Third World and elsewhere. Secondly, it enhances the Soviet Union's ability to compete with the U.S. and others in international waters and provides a fast and massive destructive force that can be applied in virtually any region of the world. Also important is the fact that with its large numbers, array of innovative units, and pervasive deployment, such a submarine fleet must have an impressive psychological impact on all countries, including those of the Third World.



Complementing the power projection capability of the Soviet Navy is the concurrent development of air power. As Robert Dorman has noted, Soviet air power:

...can perform long-range strike and reconnaissance missions all over Europe and Asia and adjacent oceans. And they have the ability to reinforce and supply most foreign nations that the Soviet government is seeking to influence politically.<sup>25</sup>

Probably the most impressive illustration of Soviet air power in the role of power projection is the air transport section of the Soviet air forces, Military Transport Aviation (VTA). Described as "...the arm that swings the fist,"<sup>26</sup> air transport development apparently has been given a high priority by Soviet military strategists. An effective air transport system provides for balanced strategic and tactical operations, and gives greater credibility to their airborne force, believed by some analysts to be the largest in the world. The aircraft currently in the inventory of VTA provide the Soviet Union with the ability of projecting a significant military presence as far as 2,000 to 3,000 miles beyond its frontiers. It is estimated that by utilizing 50 Il-76 Candid and 30 An-22 Cock transports, VTA could move up to three divisions on short notice anywhere from Morocco to Southeast Asia and have them ready for action within 24 to 48 hours.<sup>27</sup>

Nonetheless, VTA is subject to several constraints which can significantly inhibit airlift operations. Foremost among these is distance. Although the USSR has a geographical advantage in the North Africa, Persian Gulf/Indian Ocean area, and can easily move men and materiel over these shorter distances, intercontinental airlift operations

present a different picture. While the ability of VTA to engage in global operations cannot be discounted and is significant, it is limited by the lack of sufficient numbers of long-range aircraft and by insufficient experience and training in sustained long-distance airlift operations. Clearly, intercontinental VTA airlift operations present the Kremlin military leadership with many uncertainties.<sup>28</sup>

Aside from several minor types of transports in VTA's inventory, three aircraft currently form the "backbone" of its operations. These are the An-12 Cub, the An-22 Cock, and the Il-76 Candid. The oldest and least capable in terms of payload and range, the An-12 is the most numerous transport aircraft in the Soviet military aviation inventory with some 400 An-12 BP's still in service.<sup>29</sup> The An-22 Cock is clearly the most impressive plane operated by VTA in terms of size, with a wingspan of over 211 feet. The latest in a long line of giant Russian aircraft dating back to the Sikorsky Il'ya Muromets of 1913, the An-22 gives VTA an intercontinental capability. However, less than 200 in all have been built, and only about 50 remain in service with the Soviet air forces and Aeroflot combined, giving rise to speculation that its mammoth size restricts its effective application.<sup>30</sup> Others have suggested that technical problems halted production in 1974.<sup>31</sup> The Il-76 is the newest of the trio, having entered VTA service in 1974. It is still in production, and about 150 are currently operated by VTA. It has good range and payload capacity and has excellent short-field capability. Hence, it is in some ways the most impressive transport operated by VTA. However, like the An-12 and An-22, the Il-76 apparently lacks in-flight refueling

equipment, and therefore refueling must rely on ground-based facilities, which could well be at the mercy of political vagaries in the Third World.

Three new transport aircraft currently under development are also potential candidates for VTA operations. They are the An-32 Glinz and An-72 Coaler, and are designed for "hot and high" performance, i.e., short take-off and landing (STOL) operations in hot climates at high altitudes under primitive airfield conditions. Further design features include ease of maintenance and ground handling, and optimum efficiency in cargo loading and unloading. Although of limited range, these planes are capable of lifting an impressive payload. However, there are some indications that both have experienced operational difficulties resulting from design deficiencies.<sup>32</sup>

The An-400 Condor, initially reported as the An-40 in the western press, evidently was conceived as a replacement for the An-22. Clearly designed for long-range, intercontinental operations, the An-400 has impressive performance specifications, and if ever put into service in significant numbers, it will certainly enhance the power projection capability of VTA. However, it has been under development at least since 1977, and only recently entered flight development, giving rise to speculation that the Soviet aircraft industry has had difficulty in developing a suitable turbofan engine for this behemoth, which is estimated to be some 5% larger than the Lockheed C-5A.<sup>33</sup> Moreover, like the An-22, the An-400 may be limited in its operational capabilities because of its size. Certainly it would not be suitable for use in most Third World countries, thereby limiting its usefulness in a power projection role.

Supplementing the operational capability of VTA is Aeroflot, the Soviet State Airline, which serves as a transport reserve for Soviet military aviation.<sup>34</sup> Many cargo aircraft operated by Aeroflot are in the inventory of VTA. For example, An-22's have been seen in Aeroflot livery with tail gun turrets. As many as 1,300 Aeroflot planes are available to VTA on short notice.<sup>35</sup> Moreover, coordination between the operations of the two organizations is a regular and common occurrence.<sup>36</sup> Aeroflot has been involved in airlift operations on several occasions in recent years, including the periodic airlifting of Soviet troops to Afghanistan.

In addition to the aforementioned aircraft, Aeroflot has more conventional civil transport planes which can easily be pressed into service. These include the long-range Il-62 and medium/long range Tu-154, both of which were originally designed as commercial airliners. Aeroflot also has the medium-range Tu-104 which is a civil version of the Tu-16, plus several types of shorter-range airliners. Although the commercial viability of these aircraft is generally disparaged when compared with their western counterparts, the fact remains that they are fully capable of augmenting the inventory of VTA for military operations.

Two new aircraft deserving special mention are the Il-86 Camber and the Yak-42 Clobber. Designed as a civil passenger transport for operations from primitive airports, the Il-86 could easily be adapted for military purposes in airlift operations. A follow-on design, the Il-96 is expected to be a longer range version of the Il-86, and probably will complement the An-400 in VTA operations. Nevertheless, there are indications that the design ranges of the Il-82 are not being met, and the wing-mounted engine design may preclude the possibility of installing

the new generation of more fuel-efficient turbofan engines when they become available.<sup>37</sup> The Yak-42 is a short/medium range transport, designed for operations within a wide variety of climatic conditions, and from airfields with limited ground handling facilities.

As with all designs, these new VTA and Aeroflot transports represent a compromise, sacrificing range for "hot and high" performance from unimproved airfields. Just how they will be used in a power projection role remains to be seen. The An-32 and An-72 lack sufficient range for airlift operations in areas far removed from the Soviet Union, although they would be perfectly suited for deployment in Third World countries. Moreover, they are likely candidates for foreign sales and production.<sup>38</sup> The most versatile new design for long-range military diplomacy appears to be the Il-86/96. It has reasonable range, which could be augmented considerably with the fitting of air-to-air refueling equipment, it can operate out of primitive airfields, and it has a good payload capacity. Hence it could be a good complement to the Il-76. Finally, it should be remembered that, although these new designs can be utilized for military purposes, they also meet the requirements for domestic operations, wherein distances are great and terminal facilities and field conditions can be rudimentary at best. Even the An-400 has a place in domestic operations.

Although airlift operations are vitally important in any assessment of Soviet power projection capabilities, it is the long-range maritime reconnaissance aircraft which have given Soviet military aviation a virtually unprecedented global presence. Reconnaissance activities, which comprise one of the major missions of Soviet Naval Aviation (AVMF), are now carried on in five foreign countries: Cuba, Angola, Vietnam, South Yemen and Ethiopia.<sup>39</sup>

AVMF carries several types of aircraft in its inventory for this mission, including the Tu-95 Bear, Tu-16 Badger, Tu-22 Blinder, Tu-26 Backfire, and Il-38 May. The Il-4 Bison, although still in use, is considered to be obsolete and apparently is gradually being withdrawn from service. AVMF has a total of approximately 180 aircraft for reconnaissance work.<sup>40</sup> Variations of these aircraft also have been configured for strike and ASW missions.

The Tu-95, Tu-16 and Tu-22 are the surveillance "workhorses" of AVMF. Although relatively obsolete, the Tu-95 is the most significant of the three and remains in production for AVMF at between six and twelve per year for attrition replacement. It is an important aircraft because of its phenomenal range, almost 11,000 miles. This performance gives AVMF the capability of surveillance over virtually the entire Atlantic Ocean when operating out of the Soviet bases in Cuba and Angola. Between seventy and eighty remain in the AVMF inventory. Though approaching obsolete status, approximately 400 Tu-16's remain in AVMF inventory, of which forty to fifty are used for maritime reconnaissance. The Il-38 has also been deployed outside the Soviet Union. Attached to the Black Sea Fleet, it has been sent to South Yemen periodically in order to provide surveillance in the Arabian Sea. Considered by some experts to be a failure, the Tu-22 nonetheless has enjoyed a long service life, and remains in AVMF service with about fifty on inventory.<sup>41</sup>

Although these aircraft--except for the Tu-26--appear to be approaching the end of their service life, newer designs under development will doubtlessly fill the gap. Both the Il-76 and Il-86/96 appear to be likely

candidates to become the main reconnaissance planes for future AVMF operations, despite the fact that neither of them have the awesome range of the Tu-95. Moreover, it is entirely possible that the Tupolev Bureau may well find still more stretch in the Tu-95 design and produce yet another version of this venerable aircraft. Still another possibility for long-range reconnaissance and patrol duties is the new strategic bomber, the Tu Ram-P Blackjack. With an estimated range with maximum payload of 8,390 miles, the Ram-P conceivably could be a worthy successor to the Tu-95.<sup>42</sup> In addition, the Tu-26 can be expected to play a significant role for AVMF in reconnaissance and patrol activities. Finally, although very little is yet known about the An-400, it is reasonable to assume that a reconnaissance/surveillance version of that aircraft might be developed for AVMF.

#### SOVIET ARMED FORCES DIPLOMACY IN THE THIRD WORLD

The ever-expanding use of the USSR's armed forces diplomacy in the Third World centers on the preeminence of the Soviet Navy. Beginning in 1964 when Soviet ships were deployed to the Mediterranean during the Cyprus crisis, its utility as a political instrument beyond the periphery of the Soviet state became evident. This role was enhanced as Soviet vessels increased their presence in this area and eventually succeeded in gaining access to the Egyptian port of Alexandria following the 1967 Middle East War. By 1969, Soviet vessels were steadily deployed in the Indian Ocean and began periodic cruises in the Caribbean. In 1970 the Soviet Navy conducted its first world-wide naval exercise that served as a prelude to its growing global reach. Currently, the navy maintains a permanent

presence in the Mediterranean and the Atlantic, Pacific and Indian Oceans, which clearly serves as a symbol of the USSR's great-power status as well as its willingness to involve itself in the Third World.

While the Soviet Navy's primary mission is to be prepared for war, like all navies it must necessarily play an important role in the support of foreign policy objectives through peacetime missions.<sup>43</sup> This is an especially crucial aspect of Soviet Third World diplomacy where subtle factors such as prestige and perceptions are so vital. In what naval analysts Bradford Dismukes and James McConnell, in their seminal work, Soviet Naval Diplomacy, refer to as "cooperative ways" of increasing visibility and political leverage, the USSR now engages in goodwill visits and port calls to promote its Third World interests.<sup>44</sup> Admiral Gorshkov has strongly emphasized the importance of such activities in the pursuit of Soviet interests abroad:

Official visits and the working calls of our ships to foreign ports make a substantial contribution to the improvement of mutual understanding between states and peoples and to the enhancement of the international authority of the Soviet Union.<sup>45</sup>

Indeed, diplomatic port visits by the Soviet Navy have increased substantially in less-developed countries, from a mere 16 between 1953-1966 to 140 in the period 1967-1976.<sup>46</sup> Moreover, significant diplomatic activity of this type continues to increase unabated.<sup>47</sup> Additionally, the USSR has found value in deploying its navy in joint exercises with major actors in strategically important Third World regions. Particularly noteworthy were the joint naval and air exercises held with Syria during June and July of 1981 and sea maneuvers with India in 1982.<sup>48</sup>



On the other side of the armed forces diplomatic scale is the use of "coercive" methods applied by the Soviet Union in those regions where it has a perceived strategic interest. This has been dramatically illustrated whenever the USSR has used its combined armed forces to support Third World allies through involvement in internal conflicts or limited wars. This aid has taken place through a coordination of Soviet naval, military and air power. While several instances can be cited, the 1975 Angolan Civil War and the Ethiopian-Somalian Ogaden War in 1977-1978 serve as the best examples of the Soviet Union's ability to achieve its political objectives through armed forces projections in countries distant from its borders.

With direct armed forces support for the MPLA (Popular Movement for the Liberation of Angola) faction in the Angolan civil war, a new element was introduced in the Soviet involvement in the African continent; namely, the Kremlin's willingness to use force in the support of an ally in that part of the world. Beyond this is the significance attached to the success of the coordinated sea, air, and military operations employed by the USSR in this venture. For example, continuous seaborne deliveries of arms to the MPLA took place from the early 1970's and was buttressed by the deployment of Soviet naval combat forces in the Gulf of Guinea to support this operation. It was reported that Soviet naval personnel also may have participated directly in various forms of military action.<sup>49</sup> Moreover, the operations was enhanced by Tu-95 Bear D long-range reconnaissance flights initiated from Cuba and Conakry in order to patrol the Atlantic Ocean and the Gulf of Guinea.<sup>50</sup> Furthermore, a combined VTA-Aeroflot operation graphically demonstrated Soviet airlift capabilities. Some 3,000 tons of military equipment was transported by VTA from October 1975 to April 1976, using

An-22's and Il-18's. Aeroflot, using two Il-62 passenger transports, airlifted some 2,800 Cuban troops in January 1976 from Cuba to Angola.<sup>51</sup>

A much more impressive display of combined Soviet sealift and airlift capabilities is illustrated by the Ethiopian-Somalian Ogaden war when the USSR initiated a coordinated operation of massive proportions. Doubtless, the interjection of Soviet armed forces in this conflict between two strategically important African allies was a critical factor in Ethiopia's victory. As early as September 1977, Soviet and East European ships were carrying supplies to Ethiopian forces. Described as "...long, fragile and vital,"<sup>52</sup> these supply routes required and received the appropriate protection of Soviet naval combatants. Thus, in December when thirty to fifty Soviet and Bulgarian warships and freighters were enroute to Ethiopia through the Suez Canal, they were complemented by two Polnochny class and two Alligator class landing ships.

In concert with the sealift was a joint Soviet-Cuban airlift employing some 225 An-22's and Il-76's. It is estimated that approximately 15% of the Soviet military air transport fleet was utilized during the height of this operation, giving an indication of its size and intensity.<sup>53</sup> Ultimately, 35,000 Cubans were airlifted to various points in the region,<sup>54</sup> and approximately \$1 billion worth of tanks, fighter aircraft, armoured personnel carriers, artillery and other equipment was sent to Ethiopia.<sup>55</sup> Of course, the cost to the USSR for this impressive armed forces display in the support of Ethiopia was Somalia's expulsion of several thousand Soviet advisors, their renunciation of the Soviet-Somalian friendship treaty, and the withdrawal of all Soviet military facilities which included the important port of Berbera.

More recently, the growing Soviet naval presence throughout the world, along with the use of naval and air facilities in strategically important countries, has heightened Moscow's power projection role in the Third World. For example, Soviet access to the reconstructed Vietnamese naval and air bases at Cam Ranh Bay and Da Nang gives the USSR considerable presence and potency throughout Asia. With access to such facilities the USSR has the use of warm water ocean-ports and modern airbases to expand its operations into the China Sea, Pacific and Indian Oceans. The Soviet Navy now has the advantage of a provision and repair station for its Pacific Fleet enroute to the Indian Ocean, along with the ability to maintain a permanent presence of some fifteen major combatants and auxiliary ships in the China Sea. Moreover, the perennial problem of naval deployment from geographic "chokepoints" from the Soviet Pacific coast is considerably lessened.

Furthermore, a Soviet active presence in Vietnam significantly strengthens its position vis-a-vis the People's Republic of China and Japan. The USSR's strategy of "containment" of the PRC rests largely on the fact that it has fifty divisions along the Sino-Soviet border, supported by an estimated 1,700 aircraft and one-third of its SS-20 force.<sup>56</sup> As a direct result of the current Soviet-Vietnamese linkage, Soviet naval and air power along the southern and eastern flank of the PRC has been substantially increased. It is reported that the Soviet Pacific Fleet has grown to "...85 major combatants--including one carrier, 25 SSBN, 95 other submarines, 215 minor combatants, and 77 major auxiliary support ships."<sup>57</sup> The Soviet Union routinely has fifteen ships in Vietnam

and more than twenty ships in continuous transit between Vietnamese ports and Vladivostok.<sup>58</sup> This heightened naval activity is augmented by regular Bear D and F intelligence and reconnaissance flights from bases in Vietnam. The active presence of Soviet armed forces in Asia not only threatens the PRC but raises grave concerns in Japan, which is increasingly aware of the dangers posed to its key shipping routes which provide it with the bulk of its vital raw material like oil.<sup>59</sup>

Elsewhere in Asia, the USSR has thus far been unable to promote any effective political or economic ties in Thailand, Burma, Indonesia, Malaysia, Singapore or the Philippines. However, the Soviet Union continues to cultivate relations with India and has gradually increased its naval presence in the Indian Ocean. Currently, the Soviet Navy deploys an average of twenty-five major combatants in the Indian Ocean and has use of the important facility of Maputo in Mozambique. In Mozambique, the Soviet Union can use support installations for its Indian Ocean Fleet, and it has been reported that there are plans for the USSR to construct additional naval facilities in this country.<sup>60</sup>

With its continuing influence in Ethiopia, the Soviet Union not only has important political and military ties to another African state, but it also has use of naval and air bases that promote its strategic interest in the critical Middle East region, most particularly the Persian Gulf area. The USSR currently has exclusive use of both naval facilities that it constructed in the Dahlak Archipelago and the airfield in Asmara.<sup>61</sup> The significance of the Soviet position in the Horn of Africa should not be understated; the USSR has major bases from which a variety of naval

vessels and aircraft can be both serviced and deployed throughout Africa, the Indian Ocean, and the Persian Gulf.

Moscow's position in this region is further enhanced by its presence in South Yemen. The setback experienced through the loss of the Somalian port of Berbera, as a result of the Ogaden War was, in some respects, negated by the accession to power in 1978 of a Soviet-supported regime in South Yemen. As a result, the USSR has a placement of 2,000 military advisors complemented by several hundred Cuban and East German proxies. More importantly in terms of Soviet power projection in this region, is the extensive use of naval and air facilities at Aden along with the naval anchorage and fuel depot on the island of Socotra. Doubtless, the Soviet presence and influence in South Yemen presents certain strategic advantages to the USSR; specifically, its immediacy to the Persian Gulf and its potential for affecting events in Oman, which, along with Iran, is a custodian of the vitally important Straits of Hormuz.

Despite the tenuous nature of Soviet-Iraqi relations in recent years, Moscow continues to deliver sizable arms shipments to that country in the midst of the protracted Iran-Iraq War. Furthermore, it apparently continues to have the use of four Iraqi air bases.<sup>62</sup> Nevertheless, there is no evidence to suggest that the Soviet Union has ever been able to convert its position in Iraq into any meaningful economic or political influence.<sup>63</sup> Indeed, overall Soviet influence in the various countries bordering on the Persian Gulf is minimal at best, or non-existent. This being the case, Soviet strategy in this vital region is clear: failure to effectively extend its influence in the Gulf directly has caused the Soviet Union to place great

emphasis on Ethiopia, South Yemen, and Afghanistan. These countries, where Soviet military power is significant, geographically constitute a peripheral "rim" around the Persian Gulf and allow for an expanding power projection role for the USSR in this strategically important region.

Moscow has long sought to increase its power and influence in the Arab-Israeli Middle East, but has found the diplomatic terrain highly volatile, as its reversal in Egypt attests. Thus far, the Soviet failure to extend its sway over most Arab states through political, ideological, and economic means has again caused reliance to be placed almost solely on the use of the military dimension.<sup>63</sup> The extent to which the USSR is a major actor in this region is due to the conditions created by the protracted Arab-Israeli dispute; that is, the total political, economic, and military support that the United States has long given Israel has created an imbalance among the antagonists. Thus, the Arab states have turned to Moscow for the arms and diplomatic support that they require. Hence, Moscow's main point of access to the Middle East is based almost exclusively on its ability and willingness to supply arms to some of the major national and other political actors in the region.

Currently, Syria is undoubtedly a key state in determining the direction of Middle East politics. Not only is this country at the geographic and political center of the Arab-Israeli quagmire, but Damascus has the closest relations with Moscow of any government in this vital area. This relationship is based, in large part, on extensive Soviet arms transfers totalling \$5.4 billion from 1976-1980,<sup>64</sup> and on the signing of the October 1980 Soviet-Syrian treaty of friendship and cooperation. More importantly is

the mutuality of interests that are shared by Syria and the USSR at this time. The Assad government requires massive Soviet military and diplomatic support in its effort to maintain a viable position with respect to Israel, and to promote a counterweight to U.S. influence in this region. The Soviet Union, on the other hand, wishes to be an active participant in the politics of the region and to play a significant role in any future Middle East settlement.

As a result of the 1982 Lebanon conflict, USSR-Syrian relations were severely tested due to the failure of Soviet arms to effectively counteract U.S. built and supplied weapons employed by Israel against Syrian forces. In order to maintain its position with Syria, the USSR found it necessary to elevate its level of involvement in the Middle East by transferring more sophisticated air defense equipment, most notably Soviet-manned Sa-5 surface to air (SAM) batteries. Additionally, the Soviet Union replaced all the equipment that had been lost by Syria in the June 1982 campaign.<sup>65</sup> From Moscow's perspective, not to "raise the stakes" in the Middle East through its ties with Syria would have yielded disastrous consequences for further Soviet attempts to extend its influence in this strategically important region, as well as jeopardize naval access to Syrian port facilities.<sup>66</sup>

In the north African littoral, massive Soviet arms sales have not translated into easy access to military installations. However, the USSR does have use of three naval repair and refueling facilities in Algeria,<sup>67</sup> and has conducted naval visits with some regularity to Libyan ports since 1981. Moreover, continued arms sales justify the presence of Soviet

military advisors, who maintain the equipment furnished and train the troops of both of these countries. Throughout the rest of Africa, the USSR has steadily expanded its presence, mainly through its naval forces. For example, the Soviet Navy enjoys access to ports in Nigeria, the Congo, Guinea-Bissau, as well as naval installations in Mauritius and the Cape Verde and Seychelle Islands. Also noteworthy, are Soviet plans to construct a new dock and fueling facility in Benin.<sup>68</sup> Of major significance is the continuous use of both naval and air installations in Angola. The port of Luanda serves as the primary logistical and maintenance base of the Soviet Navy's West African Patrol, which usually consists of five to seven units. The major missions of the Soviet armed forces operating out of Angola are to maintain a substantial presence in this area, provide a contingency show of force, and conduct regional reconnaissance by the Bear D aircraft deployed there.<sup>69</sup>

Soviet power projection in the Caribbean/Gulf of Mexico region historically has been very limited. However, increased Soviet involvement in Cuba in recent years has emphasized the USSR's coming of age as a global power. In addition to the estimated \$3.5 billion annual allotment to support the sagging Cuban economy, the Soviet Union has provided grants of more than \$3 billion in arms since the early 1960's.<sup>70</sup> The symbolic commitment to the Castro regime as well as its use of Cuba as an important point for Moscow's projection in this strategic area is well illustrated by the sizable presence of Soviet personnel. Currently, the Soviet military presence includes a ground forces brigade of approximately 2,600 men and some 8,000-10,000 military and civilian advisors.<sup>71</sup> Military advisors are responsible for providing technical advice for the operation of weapons



such as the MIG aircraft, surface-to-air missiles and Foxtrot class submarines.<sup>72</sup> Moreover, some Soviet personnel are attached to a sophisticated intelligence-collection facility which monitors U.S. military and civilian communications.

Since 1969, Soviet maritime activity in and around Cuba has been considerable.<sup>73</sup> The extensive use of Cuban ports has allowed the USSR to maintain a sizable naval presence in this area, augmented by a variety of other vessels including intelligence-gathering, hydrographic, and space-support ships. This continuous maritime presence is supported by a salvage and rescue ship maintained by the Soviet Navy in Havana.<sup>74</sup> Furthermore, since 1975, Cuban airfields have served as a base for Soviet Bear D aircraft used for reconnaissance flights.

Clearly, the Soviet-Cuban linkage strategically places the USSR in the Western hemisphere and allows it a number of options in this turbulent region, both in peacetime and during periods of crisis. However, it seems apparent at this juncture that Moscow is content to restrict its armed forces presence in the Caribbean basin to Cuba. For example, while Soviet commercial vessels make periodic port calls throughout the area, visits of surface warships to other Caribbean ports are rare. Doubtless, this reflects a degree of caution and/or a concern with overextension in a region where the Soviet Union acknowledges U.S. preeminence. Nevertheless, to the extent that protracted crisis marks Central and South American politics, and continued Cuban activities in these regions coincide with Soviet interests, the USSR will continue to play a role. Moreover, the recent deployment of a Soviet naval task force--the largest ever to enter the Caribbean--which includes the Leningrad, VTOL carrier and two destroyers,

indicates that the USSR will continue to expand its armed forces presence in this area.

#### CONCLUSIONS

The USSR's Third World activities must certainly be seen within the context of its perceived national interests. Increasing Soviet involvement in the developing regions through its reliance on the armed forces has broadly benefitted that country in terms of its global aspirations in a number of ways. For example, through its military presence in these regions, the USSR has placed itself in strategically sensitive points throughout the world: installations in Vietnam, giving it a stronger position in Asia; its naval and air power contingents operating out of Asmara, Aden, and the Dahlak Islands at the access to the Red Sea and Suez Canal, and in proximity to the Persian Gulf; use of facilities in Luanda for power projection in the Atlantic Ocean and throughout Africa; and its highly visible presence in Cuba, positioning itself off the coast of the United States and in Central and South America. Moreover, Soviet relations in Third World countries have now enabled Moscow to involve itself in regional politics to a much greater degree than ever before.

Given its deficiencies in the use of other foreign policy instruments, the Soviet Union will continue to make optimum use of its armed forces in Third World regions. Thus, it can be expected that the USSR will continue in its attempt to secure access to port facilities and air bases in various developing countries. In addition to its obvious strategic value, such access also gives Moscow an opportunity to employ an impressive display of military might to affect the perceptions of selected Third World countries. The importance of this dimension of armed forces diplomacy

has been noted by Milan Vego: "The Soviets correctly assume that the perception of military capabilities, when dealing with the problems of the Third World, is often more important than real power."<sup>75</sup>

Given current trends, all evidence suggests that the major military instruments of global power projection will continue to develop, and thus the Soviet's ability to support its objectives in developing areas will certainly be enhanced. It would be incorrect, however, to assume that on-going construction of existing ships and aircraft, as well as innovative designs of the future, are related to a one-dimensional purpose. It is more likely that such military production serves a variety of interrelated domestic and foreign policy imperatives. It is also evident that serious limitations persist in Soviet naval and air power projection capabilities, in what can be construed as an emphasis of "breadth" over "depth" in current construction programs. This is illustrated by such things as the building of a "one of a kind" Berezina class and the limited production of the Kirov and Ivan Rogov classes. The current lack of a conventional aircraft carrier and the questions raised concerning a suitable fighter plane for the carrier now in production further points to problems inherent in Soviet global power projection. Soviet armed forces projection is significant, but continues to lag behind the United States' ability to provide rapid and sustained operations in regions distant from its borders. This is particularly noteworthy in the continued deficiencies apparent in Soviet amphibious and air transport capabilities.

Despite the extensive use of military diplomacy, Moscow's activities in Third World countries have yielded a mixed set of successes and failures. The USSR's achievements are largely a result of those circumstances when

Soviet interests coincide with those of regional states. Such is the case with those countries which currently maintain a high level of Soviet armed forces visibility, such as Vietnam, Ethiopia, South Yemen, Syria, Angola, and Cuba. Moreover, the Soviet Union has been successful in its application of "coercive" diplomacy in those instances when it was advantageous and there was a strong possibility of success, as in the Angolan and Ethiopian operations.

On the other hand, the record of Soviet relations with developing countries is replete with political reversals as well. Moscow's inability to forge significant economic and ideological linkages to supplement its military presence in these countries has generally prevented long-term bilateral commitments. Thus, while access to overseas bases and other installations are of vital importance to the USSR's global strategy, the Soviet Union has been unable to obtain the use of naval facilities guaranteed for any length of time by formal treaty arrangements.<sup>76</sup> Furthermore, Moscow has found it extremely difficult to consolidate the respective interests of "friendly" regimes in a particular geographical region. Local and regional conflicts--such as those in the Horn of Africa and the Middle East--frequently militate against the Soviet attempt to exercise regional dominance. Moscow's Third World policy has also been encumbered by its inability to establish an effective rapport with the indigenous people of those developing countries where it has a presence.<sup>77</sup>

Thus, there are no guarantees of success for Soviet Third World policies. Nonetheless, Moscow can be expected to maintain its global role and to exploit opportunities for strategic gain in selected regions where perceived Soviet national interests are present. Moreover, the USSR doubtlessly will

continue to employ its most effective instrument of power projection, its armed forces. As one of the two global superpowers, the Soviet Union could hardly be expected to do otherwise.

<sup>1</sup>For a review of the evolution of Soviet globalism see, Roger E. Kanet, "The Soviet Union as a Global Power" in Roger E. Kanet (ed.), Soviet Foreign Policy in the 1980's (New York: Praeger, 1982), pp. 3-13.

<sup>2</sup>There are specific objectives applicable to most Soviet Third World activity: "...to gain control over raw materials vital to Western economies; to demonstrate support for left-wing regimes; to 'capture' Third World states for the Communist Bloc; to keep Chinese influence out of The Third World; to gain strategic advantage, through the use of military facilities that might be useful in war; to acquire footholds for use in peace as a means of extending influence; to divert the attentions of Western powers away from Soviet borders; to obtain useful economic concessions, as in fishing rights." Jonathan Alford, "The New Military Instruments" in E. J. Feuchtwanger and Peter Naylor (eds.), The Soviet Union and The Third World (New York: St. Martin's Press, 1981), p. 13.

<sup>3</sup>On this point, W. Raymond Duncan has written: "The troublesome issue in Soviet Third World affairs is Moscow's growing tendency to accentuate military techniques of influence over economic leverage. This pattern seems relatively clear in Soviet policy toward Africa, South Asia, and Southeast Asia (support of Vietnam's military adventures). It is understandable given the apparent recognition in Moscow that the world economic system continues under strong dominance by Western capitalism and that past Soviet foreign economic-aid programs have not produced as great change as anticipated earlier." "Soviet Policy in the Developing Countries" in W. Raymond Duncan (ed.), Soviet Policy in Developing Countries (Huntington, NY: Robert E. Krieger, 1981), p. 7.

<sup>4</sup>For an analysis of how sea power can be used as an instrument of diplomacy, see Hedley Bull, "Sea Power and Political Influence," Adelphi Papers, no. 122 (Spring 1976): 1-9.

<sup>5</sup>Cited in Bull, "Sea Power and Political Influence," p. 6.

<sup>6</sup>S. G. Gorshkov, The Sea Power of the State (Annapolis: Naval Institute Press, 1979), p. xxi.

<sup>7</sup>Norman Polmar, Guide to the Soviet Navy 3rd ed. (Annapolis: Naval Institute Press, 1983), p. 125. Also see, John Moore (ed), Jane's Fighting Ships 1983-84 (London: Jane's Publishing Company Limited, 1983), p. 506.

<sup>8</sup>For additional information on the new carrier, see Jan S. Breemer, "The New Soviet Aircraft Carrier," U.S. Naval Institute Proceedings 107/2/942, (August 1981): 30-35; Floyd D. Kennedy, Jr., "Sea Services," National Defense LXVIII, no. 394 (January 1984): 8-10; and Miles A. Libbey, "Blue Water At Last: Missions of and NATO Responses to the New Soviet Aircraft Carrier," Naval War College Review 33, no. 6 (November-December 1980): 44-52.

<sup>9</sup> Intelligence reports have indicated that the Flogger 5 has been used in catapult and arresting gear tests. See Polmar, Guide to the Soviet Navy, p. 17; Bill Sweetman, Soviet Military Aircraft (New York: Praeger Press, 1981), p. 15; John W. R. Taylor (ed.), Jane's All the World's Aircraft (London: Jane's Publishing Co., Ltd., 1983), p. 217. For information on the Fencer see Moore, Jane's Fighting Ships, 1983-84, p. 506.

<sup>10</sup> The MiG-31 has a much higher wing loading and a thinner wing section than either the MiG-29 or Su-27. See Bill Sweetman, "New Soviet Combat Aircraft-quality with quantity?" International Defense Review 17, no. 1 (1984): 35-38 and Clarence A. Robinson, Jr., "Soviets Deploying New Fighters," Aviation Week and Space Technology 119, no. 22 (28 November 1983): 18-20.

<sup>11</sup> Breemer, "The New Soviet Aircraft Carrier," p. 34.

<sup>12</sup> There are currently three Kiev class ships in operation with one in production at the Black Sea Shipyard, Nikolayev (south). Polmar, Guide to the Soviet Navy, p. 126.

<sup>13</sup> For additional information on limitations of the Yak-36 see Sweetman, Soviet Military Aircraft, pp. 196-197.

<sup>14</sup> James H. Hansen, "Soviet Projection Forces: Their Status and Outlook," Armed Forces Journal International 119, no. 2 (October 1981), p. 80. One Kirov class cruiser has been operational since 1980 with a second nearing completion.

<sup>15</sup> Polmar, Guide to the Soviet Navy, p. 133 and Soviet Military Power, 1983 (Washington: U.S. Government Printing Office, 1983), p. 58. For an in-depth review of this new cruiser see Armin Witterham, "The Soviet Guided Missile Cruiser Slava," International Defense Review 17, no. 1 (1984): 21-26.

<sup>16</sup> There are two Udaloy class destroyers completed with two more in production. Two Sovremennyy class destroyers are operational with two more in production. Polmar, Guide to the Soviet Navy, pp. 155-158.

<sup>17</sup> "The technical excellence of the Berezina suggests that the Soviet Navy could develop this capacity much more if it wanted to: its failure to do so suggests that the task of replenishment at sea is still accorded a low priority. Nevertheless, the limited size and reach of the support fleet, its generally indifferent performance, its cumbersome administration and its still rather limited access to shore facilities must all considerably inhibit the Soviet Navy's ability to conduct sustained military operations on the open oceans." Bryan Ranft and Geoffrey Till, The Sea in Soviet Strategy (Annapolis: Naval Institute Press, 1983), p. 133. Currently, the Soviet Navy has approximately 85 underway replenishment ships and 135 fleet support of various design and functions. These figures are derived from Polmar, Guide to the Soviet Navy.

<sup>18</sup>For an interesting review of the Soviet merchant fleet, see J. S. Coe, "The Soviet Merchant Fleet Wins by Losing," Proceedings 107/12 (December 1981): 70-71.

<sup>19</sup>Polmar, Guide to the Soviet Navy, p. 413.

<sup>20</sup>Polmar, Guide to the Soviet Navy, p. 413.

<sup>21</sup>Hansen, "Soviet Projection Forces...." p. 81.

<sup>22</sup>Hansen, "Soviet Projection Forces...." p. 81.

<sup>23</sup>For an examination of the Soviet naval construction program, see Louis Andolino, "Warsaw Pact Sea Power Assets" in Robert W. Clawson and Lawrence S. Kaplan (eds.), The Warsaw Pact: Political Purpose and Military Means (Wilmington, DE: Scholarly Resources Inc., 1982): 195-211. For an informative analysis of current trends in the Soviet Navy, see Norman Friedman, "The Soviet Fleet in Transition," Proceedings/Naval Review 109/5/963 (1983): 156-173.

<sup>24</sup>See Thomas A. Brooks, "Their Submarines," Proceedings 110/1/971 (January 1984): 48-50.

<sup>25</sup>Robert Berman, Soviet Air Power in Transition (Washington: Brookings Institution, 1978), p. 13.

<sup>26</sup>C. Kenneth Allard, "A Clear and Present Danger: Soviet Airborne Forces in the 1980's," in Uri Ra'anan, Robert L. Pfaltzgraff, Jr. and Geoffrey Kemp, Projection of Power (Hamden, CT: Archon Books, 1982), p. 147.

<sup>27</sup>Alford, "The New Military Instruments," p. 22. Such an airlift operation is reported to have been carried out in October 1979 to South Yemen and Ethiopia. Allard, "A Clear and Present Danger...." p. 159.

<sup>28</sup>Others dispute this assertion. For example, see Gary D. Payton "The Soviet-Ethiopian Liaison and Beyond," Air University Review XXXI, no. 1 (November-December 1979): 66-73.

<sup>29</sup>Taylor, Jane's All The World's Aircraft, p. 198.

<sup>30</sup>For a review of the operational limitations of the An-22, see Sweetman, Soviet Military Aircraft, p. 43.

<sup>31</sup>Peter Borgart, "The Soviet Transport Air Force," International Defense Review XXI (July 1979), p. 945.

<sup>32</sup>For design features of the Cline and Coaler which are applicable to Third World operations, see Bill Gunston, Aircraft of the Soviet Union (London: Osprey Publishing Ltd., 1983), pp. 52-54 and Sweetman, Soviet Military Aircraft, pp. 47-48.



<sup>31</sup>Soviet Military Power, p. 46 and Sweetman, Soviet Military Aircraft, p. 19, 20.

<sup>34</sup>"Aeroflot's sizable fleet of special cargo aircraft and helicopters could easily be retrained for special transport tasks in any emergency." Hugh McDonald, Aeroflot: Soviet Air Transport Since 1923 (London: Putnam and Company Ltd., 1970), p. 32.

<sup>35</sup>Alford, "The New Military Instruments," p. 22.

<sup>36</sup>"Commanded by an air marshal, the airline is regarded as a full-time reserve transport force which may be called upon at any time to support military operations," Anthony Robinson (ed.), Air Power: The World's Air Forces (New York: Ziff-Davis Publishing Co., 1980), p. 165.

<sup>37</sup>Gunston, Aircraft of the Soviet Union, p. 16.

<sup>38</sup>95 An-32's have been ordered by India; moreover, Cape Verde, Sao Tome and Principe, and Tanzania have been mentioned as potential customers. Taylor, Jane's All The World's Aircraft, p. 202.

<sup>39</sup>Soviet Military Power, 1983, pp. 81-85.

<sup>40</sup>Ranft and Till, The Sea in Soviet Strategy, p. 115.

<sup>41</sup>For a review of the major surveillance aircraft operated by AVMF see, "Soviet Air Power...The Even-Escalating Threat," Air International 20, no. 6 (June 1981), pp. 282-283 and Sweetman, Soviet Military Aircraft, pp. 163-169.

<sup>42</sup>Gunston, Aircraft of the Soviet Union, p. 352.

<sup>43</sup>See Kenneth R. McGruther, The Evolving Soviet Navy (Newport: Naval War College Press, 1978), pp. 63-67 and Ranft and Till, The Sea in Soviet Strategy, pp. 193-202.

<sup>44</sup>Bradford Dismukes and James McConnell (eds.), Soviet Naval Diplomacy (New York: Pergamon Press, 1979), p. xiii.

<sup>45</sup>Gorshkov, The Sea Power of the State, p. 251.

<sup>46</sup>Charles C. Petersen, "Showing the Flag," in Dismukes and McConnell, Soviet Naval Diplomacy, pp. 89-90.

<sup>47</sup>For a summary of Soviet diplomatic port calls to 1980 based on ship days, see Bruce W. Watson, Red Navy at Sea: Soviet Naval Operations on the High Seas, 1955-1980, (Boulder: Westview Press, 1982). Diplomatic port calls and goodwill missions have, of course, been augmented by the pervasive presence of the Soviet civil fleet and commercial airlines in the developing countries in recent years. Michael D. Davidchik and Robert B. Mahoney, Jr., "Soviet Civil Fleets and the Third World," in Dismukes and McConnell, Soviet Naval Diplomacy, pp. 320, 332-333.

<sup>48</sup>The USSR-Syrian exercise, which included the Soviet helicopter carrier *Priluk*, supported by six amphibious ships, took place after two Syrian helicopters had been shot down by Israeli fighters. Doubtless, the reason for this particular exercise was to demonstrate continued Soviet interest in the region and possibly to give some warning to Israel. Peter Hertel discusses, "Naval Infantry" in David R. Jones (ed.), Soviet Armed Forces Review Annual 6 (Gulf Breeze, FL: Academic International Press, 1982), p. 234. The Soviet-Indian naval maneuvers were cited in Jane's Defense Review 4, no. 6 (1983), p. 557.

<sup>49</sup>Watson, Red Navy at Sea....p. 63.

<sup>50</sup>Watson, Red Navy at Sea....p. 63.

<sup>51</sup>William J. Durch, Michael D. Davidchik and Abram N. Shulsky, "Other Soviet Interventionary Forces - Military Transport Aviation and Airborne Troops," in Dismukes and McConnell, Soviet Naval Diplomacy, p. 341.

<sup>52</sup>Ranft and T-11, The Sea in Soviet Strategy, p. 192.

<sup>53</sup>Colin Legum, "Angola and the Horn of Africa," in Stephen S. Kaplan (ed.), Diplomacy of Power: Soviet Armed Forces as a Political Instrument (Washington: The Brookings Institution, 1981), p. 621.

<sup>54</sup>Amos A. Jordan and Brian Dickson, "NATO's Global Challenge," NATO's Sixteen Nations 28, no. 7 (November 1983), p. 23.

<sup>55</sup>Christopher Clapham, "The Soviet Experience in the Horn of Africa," in Feuchtwanger and Nailor, The Soviet Union and the Third World, p. 213.

<sup>56</sup>Soviet Military Power, 1983, p. 97.

<sup>57</sup>Anthony H. Cordesman, "The Military Balance in Northeast Asia: The Challenge to Japan and Korea," Armed Forces Journal International (November 1983), p. 92. The addition of a second VTOL aircraft carrier, the *Novorossisk*, to the Pacific Fleet with a port call to Cam Ranh Bay is also reported. Christian Science Monitor, 14 February 1984, p. 2.

<sup>58</sup>The Soviet Navy also has an annual average of about 150 ship visits to Vietnam with over 2,000 ship days in port. Cordesman, "The Military Balance...." p. 92.

<sup>59</sup>See Geoffrey Murray "Japan seeks diplomatic 'bridge' to Vietnam, but no results so far," Christian Science Monitor, 19 January 1984, pp. 14-15.

<sup>60</sup>Jordan and Dickson, "NATO's Global Challenge...." p. 27.

<sup>61</sup>Soviet Military Power, 1983, p. 93.

<sup>62</sup>Jordan and Dickson, "NATO's Global Challenge...." p. 27.

<sup>63</sup>This is true despite the fact that the USSR and Iraq signed a treaty of friendship in 1972.

<sup>64</sup>Jordan and Dickson, "NATO's Global Challenge...." p. 27.

<sup>65</sup>Soviet Military Power, 1983, p. 94. It should also be noted that estimates of Soviet military and civilian personnel in Syria range from 4,000 to 8,000.

<sup>66</sup>The extent of Moscow's commitment to Syria was highlighted by the March 1984 visit of Politburo member and First Deputy Premier Geidar Aliyev who reportedly "...pledged to Syria the Soviet Union's full support." Christian Science Monitor, 12 March 1984, p. 2.

<sup>67</sup>Jordan and Dickson, "NATO's Global Challenge...." p. 27.

<sup>68</sup>Jordan and Dickson, "NATO's Global Challenges...." p. 27.

<sup>69</sup>Soviet Military Power, 1983, p. 93.

<sup>70</sup>Soviet Military Power, 1983, p. 88.

<sup>71</sup>U.S., Department of State, Cuban Armed Forces and the Soviet Military Presence, Special Report no. 103, August 1982, p. 5.

<sup>72</sup>Cuban Armed Forces and the Soviet Military Presence, p. 5.

<sup>73</sup>For an informative analysis which cites a number of political-military reasons for Soviet naval activities in this area, see James D. Theberge, "Soviet Naval Presence in the Caribbean Sea Area," in James L. George (ed.), Problems of Sea Power As We Approach the Twenty-First Century (Washington: American Enterprise Institute for Public Policy Research, 1981), pp. 182-183.

<sup>74</sup>Despite access to Cuban ports, the Soviet desire for a permanent facility at Cienfuegos has thus far been thwarted by its apparent heeding of U.S. warnings not to establish such a naval base in the Western hemisphere. See Theberge, "Soviet Naval Presence in the Caribbean Sea Area," pp. 188-189.

<sup>75</sup>Milan Vego, "Their Operations in the Third World," Proceedings 110/1/971 (January 1984), p. 56.

<sup>76</sup>Rajan Menon, "Military Power, Intervention, and Soviet Policy in the Third World," in Kanet, Soviet Foreign Policy in the 1980's, p. 271.

<sup>77</sup>For example, see Piero Benetazzo, "Angola paradox: nation both loves, hates its East-West patrons," Christian Science Monitor, 20 January 1984, p. 12.

**END**

**FILMED**

**3-85**

**DTIC**

